

pages in FIG. 10a. The cursor is then used in FIG. 10b to select a page layout style and to cause the resulting image to be sent to a printer for printing.

#### Detail Description Paragraph - DETX (38):

[0052] One advantage to performing these operations on the camera instead of after downloading the images to the computer is that the processing can be done before image compression. Some operations can also reduce the size of the image, which will thereby reduce the storage requirements for the image. For example, regions that were discarded when an image was cropped would not need to be stored on the camera. Further, this can eliminate the need for an external computer altogether. The images can be sent directly to the printer or other external device.

#### Detail Description Paragraph - DETX (40):

[0053] If the position of the camera is very precisely known, a higher resolution image can be synthesized from several images taken with slightly different locations. Also, by tracking the camera's position and possibly even guiding the operator to the correct position, a second image could be captured at a location that provides a good stereoscopic pair to the first image. The

Publication May 6, 2004 Sheet 5 of 8 US 2004/0085455 A1

FIGURE 5a

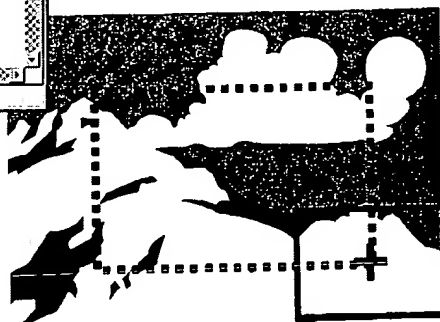
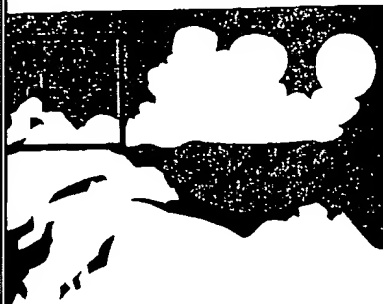


FIGURE 5b

	U	1	Document ID	Issue Date	
84			US 5543925 A	19960806	Playback presentation
85			US 20040085455 A1	20040506	Pointing device
86			US 5384912 A	19950124	Real time

[0144] In one embodiment, the image file header 194 also includes parameters indicating "cropped image boundaries." This is useful for partial copies of the image file that contain data only for a cropped portion of the image, which in turn is very useful when a client computer is being used to perform pan and zoom operations in an image. For instance, a user may have requested only a very small portion of the overall image, but at very high resolution. In this case, only the tiles of the image needed to display the cropped portion of the image will be included in the version of the image tile sent to the user's client computer, and the cropped image boundary parameters are used to convey this information to the procedures that render the image on the client computer. Two types of image cropping information are provided by the image file header 194: cropping that applies to the entire image file, and any further cropping that applies to specific subimages. For instance, when a client computer first receives an image, it may receive just the lowest resolution level subimage of a particular base image, and that subimage will typically not be cropped (compared to the full image). When the client zooms in on a part of the image at a specified higher resolution level, only the tiles of data needed to generate the portion of the image to be viewed on the client computer are sent to the client computer, and thus new cropping parameters will be added to the header of the image file stored (or cached) in the client computer to indicate the cropping boundaries for the subimage level or levels downloaded to the client computer in response to the client's image

	U	1	Document ID	Issue Date	
89	<input type="checkbox"/>	<input type="checkbox"/>	US 5995936 A	19991130	Report ge and videc image to
90	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 20020018072 A1	20020214	Scalable with/witho
91			US 5887243 A	19990323	Signal pro

tes

Publication Publication (10) Pub. No.: US 2002/0018072 A1  
(45) Pub. Date: Feb. 14, 2002

PHICS IMAGE DRAWINGS  
LUTION IMAGE  
IMAGE DATA RE-USAGE

Publication Classification

(51) Int. Cl. G09G 5/00  
(52) U.S. Cl. 345/647

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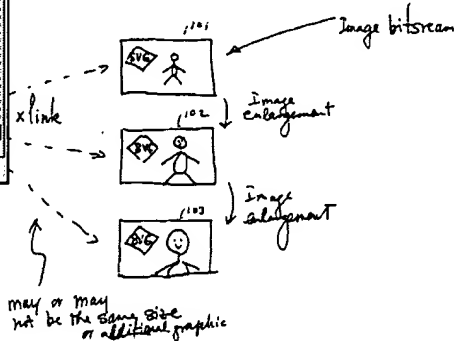
(57) ABSTRACT

Abstract  
2025-1026 (US)  
553,546  
y 10, 2001

Application Data

provisional application No.  
May 11, 2000.

A method and apparatus for creating a background or foreground image at different resolutions with a scalable graphic element is described. In one embodiment, the method comprises selecting a version of an image for display with a scalable graphic. The version of the image is at one of a plurality of resolutions. The method also includes generating the version of the image from a first image bitstream from which versions of the image at two or more of the plurality of resolutions could be generated. One of the versions is generated using a first portion of the first image bitstream and a second of the versions is generated using the first portion of the first image bitstream and a second portion of the first image bitstream.



## Brief Summary Text - BSTX (4):

Recently, many devices have been developed for recording individual visual image frames on recording discs, e.g. magnetic video discs. It is advantageous to be able to transfer the images from an inexpensive and/or reusable disc on which they were initially recorded to a permanent storage disc and, in the process, to edit the images, e.g. by eliminating unwanted images, rotating selected images, selectively cropping images and/or enlarging or decreasing the size of selected images. Such editing techniques are well known in the television art, but are accomplished by electronic means that are prohibitively expensive and complex for amateur or mass market use.

## Detailed Description Text - DETX (7):

The transfer disc 30 which may be generated by (1) an electronic still camera, (2) a television camera, or (3) by a photofinisher during the processing of film from a conventional still camera, contains a plurality of images, with each image recorded on a separate track in the NTSC format as if the camera was held horizontally. Thus, the images recorded on the transfer disc 30 and read by the playback head 32 are analogous to a strip of uncut transparencies, some images are horizontal, some vertical, some would benefit from cropping and some should be discarded entirely.

nt Mar. 19, 1985

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4,506,304

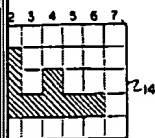


FIG. 2A

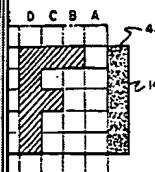


FIG. 2B

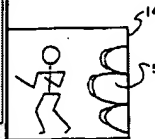


FIG. 3A

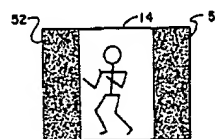


FIG. 3B

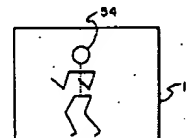


FIG. 4A

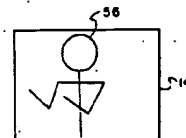


FIG. 4B

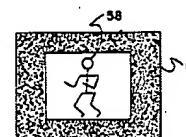


FIG. 4C

	U	1	Document ID	Issue Date	
1			US 20020191810 A1	20021219	Apparatu
2			US 4506304 A	19850319	Apparatu from one
3			US 20010013890 A	20031202	Attachme assembly

(a) Image capture system;

(b) Video conferencing and still image capture system

USE - For attaching camera with personal digital assistant (PDA) in video conferencing and still image capture system.

ADVANTAGE - By utilizing power of CPU in PDA for image compression, circuitry needed in camera assembly is reduced, thereby cost is reduced. Need for a separate display on camera assembly is eliminated. Software stored in memory of PDA is used to manipulate image acquired by camera assembly to perform operations such as changing size, aspect ratio, cropping, changing colors and brightness and other special effects such as solarization, making negatives, deleting and annotating images. By mounting the camera in the cradle of PDA, the assembly is capable of being easily carried.

DESCRIPTION OF DRAWING(S) - The figure shows the perspective view of the attachment apparatus.

PDA 100

Dec. 2, 2003

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US 6,657,654 B2

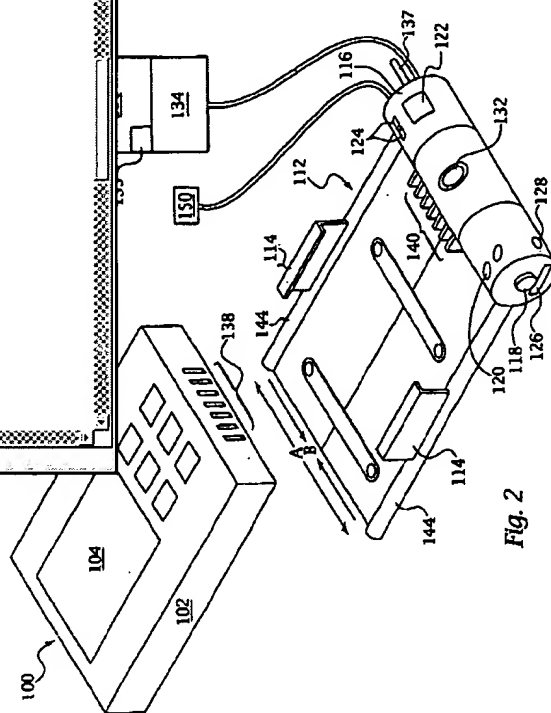


Fig. 2

	U	1	Document ID	Issue Date	
2			US 4506304 A	19850319	Apparatu from one
3			US 20010013890 A	20031202	Attachme assembly transferri
4			US 6571246 B1	20030527	Automatic process